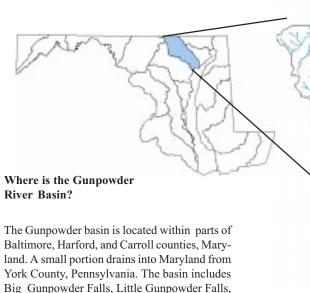


Gunpowder River Basin

Current Status of Wadeable Streams

Stream Quality
Good

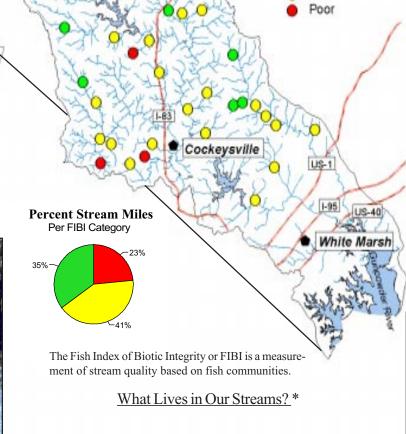
Fair





Loch Raven Reservoir and Prettyboy Reservoir.

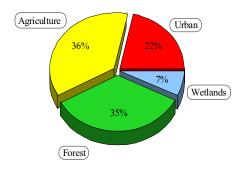
The Gunpowder River basin hosts the scenic Loch Raven Reservoir which provides drinking water to surrounding areas.



Estimated Fish Abundance:	3.2 million
Number of Fish Species:	40
Number of Gamefish Species:	5
Number of Reptile and Amphibian Species:	13
Number of Freshwater Mussel Species:	2

^{*}Based on Maryland Biological Stream Survey collections in wadeable streams basin-wide during 1996.

Land Use in the Basin



Land use in the 478 square miles of the basin remains rural, but development pressure is significant and poses a threat to natural resources. The population density of the basin is currently 981 people per square mile. This number is expected to increase by 15% in the next 20 years.



Water Quality

Oxygen - All of the streams in the basin had oxygen levels that met the state water quality standard of 5 mg/L.

Nitrate - All of the streams in the basin had nitrate levels above 1 mg/L, indicating that excess nutrients are an environmental problem.

Buffering Capacity - 13% of the streams in the basin are only moderately buffered against acid

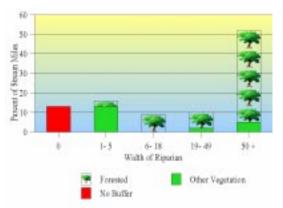






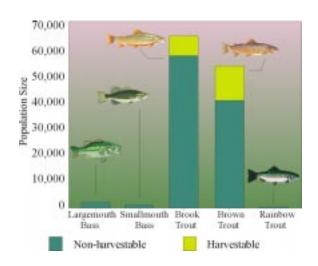
Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. Riparian buffers in the Gunpowder River basin are in fair condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



Gamefish

Five species of gamefish were found in the basin. Brook trout were by far the most abundant of the gamefish collected, but there were more harvestable-size brown trout.





Did You Know???



- ♦ With forest clearing and other human related landscape alterations in the basin, summer stream temperatures have increased, along with nutrient levels.
- ♦ About 1.5 million people receive their drinking water from two reservoirs on the Big Gunpowder Falls: Prettyboy and Loch Raven.
- ♦ We may be losing an irreplaceable part of our natural heritage. Though the native brook trout were found in about one-fifth of the streams in the basin, expanding human population may destroy the trout's cool, tree-shaded habitat



Brook trout, uncommon in many wadeable streams in Maryland, are abundant in the Gunpowder River basin.

Community Involvement

Want to help? These community groups can show you how!

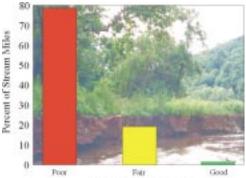
Alliance for the Chesapeake Bay 6600 York Road, Suite 100 Baltimore, MD 21212 Kathleen Millan (410) 377-6270

Gunpowder Valley Conservancy Box 261 Kingsville, MD 21087 Charlie Conklin (410) 661-1233 Ed Stubing (410) 671-3089



Stream Bank Stability

Eroded, unstable stream banks reduce habitat quality and contribute to water quality problems in downstream areas. On average, stability of stream banks in the basin is poor to very poor. As lands within the basin were developed for agriculture and later urbanized, some stream banks became highly eroded. Since the streams in this basin flow into the Chesapeake, this bank instability causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



Recreation

Stream Bank Condition

The basin has several publically owned lands that provide recreational activities. Some of the popular park sites include Gunpowder Falls State Park, Dundee Creek Marina, and Days Cove Environmental Center. Activities include canoeing, swimming, hiking, boating, bicycling, fishing, and nature studies. Tubing is a popular summer activity in the Gunpowder River basin.



Many recreational activities, such as boating, are available within the basin.

For more detailed information on streams in the Bush River basin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8611 or email asmith@dnr.state.md.us.